Application No. 10/589,274

Paper Dated: November 22, 2010

In Reply to USPTO Correspondence of August 25, 2010

Attorney Docket No. 1455-062312

## REMARKS

Applicants thank the Examiner for the courtesies extended during the telephone interview conducted on October 7, 2010. During the interview, the Examiner stated that amending the claims to clarify that the inert gas and the cooling water are mixed prior to introduction into the retention tank would distinguish over the Rosewell patent.

This Amendment is responsive to the August 25, 2010 Office Action. Claim 1 has been amended. Support for the claim amendment may be found, for example, in paragraphs [0038]-[0040] and [0045]. Claims 1-3 and 5-9 are pending in this application.

Claims 1 and 7 stand rejected under 35 U.S.C. § 103(a) for obviousness over United States Patent No. 4,310,385 to Rosewell alone or in view of United States Patent No. 7,218,101 to Kuljis et al. or United States Patent No. 5,802,125 to Fife. In view of the foregoing amendments and the following remarks, reconsideration and withdrawal of this rejection are respectfully requested.

Amended independent claim 1 recites, inter alia:

...a mixer including piping respectively extending from the compressed gas tank and the cooling water storage tank, connected to each other to mix an inert gas from the compressed gas tank with cooling water from the cooling water storage tank, and supplying a mixture of the inert gas and the cooling water to the molten core material retention tank to prevent a steam explosion.

Rosewell, whether considered alone or in combination with Kuljis or Fife, fails to teach or suggest a mixer as recited in amended independent claim 1.

In the claimed invention, the mixer mixes an inert gas from the compressed gas tank with cooling water from the cooling water storage tank, and supplies a mixture of the inert gas and the cooling water to the molten core material retention tank to prevent a steam explosion. Applicants respectfully submit that a functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used (see MPEP § 2173.05(g)).

In Rosewell, flux material granules (eutectic) (65) and coolant (66) are in a storage chamber (42) of a holding vessel (41) so as to be discharged by a pressure of the gas (67). In other words, the gas (67) in the storage chamber merely supplies the operating power

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(pressure) for discharging flux material granules (65) and the coolant (66) from the storage chamber (42). Therefore, the gas (67) does not flow into the containment vessel (11). Further, even if the gas (67) does flow into the containment vessel (11), the gas would flow into the containment vessel (11) after the flux material granules (65) and the coolant (66) flow into the vessel (11) due to the low pressure in the containment vessel (11). In other words, in Rosewell, the gas (67) is never mixed with the coolant (66) as required by independent claim 1. Kuljis and Fife are relied upon by the Examiner to disclose a pressure vessel having a liner internal to the

Therefore, for at least the foregoing reasons, the cited references fail to render independent claim 1 obvious. Reconsideration and withdrawal of this rejection are respectfully requested.

vessel and fail to overcome the deficiencies of Rosewell noted above.

Claim 7 depends from and adds further limitations to independent claim 1 and is deemed to be in condition for allowance for all the reasons discussed above with respect to independent claim 1.

## CONCLUSION

In view of the foregoing amendments and remarks, Applicants respectfully request reconsideration of the objections and rejections and allowance of pending claims 1-3 and 5-9.

Respectfully submitted,

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